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09/645,279	08/24/2000	Caren H Baker	EMPIR-020PUS	3823

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EXAMINER
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STEELMAN, MARY J

ART UNIT	PAPER NUMBER
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2122

20

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/645,279

Applicant(s)

BAKER ET AL.

Examiner

Mary J. Steelman

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/12/03, 1/26/04, 3/5/04
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>#18, #19</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to Amendment B filed 11/12/2003 and RCE filed 01/26/2004.
2. Claims 1-19 are pending. Claims 1, 8, 13, 14, 16, and 18 are amended.

#### *Information Disclosure Statement*

3. IDS received 03/03/2004 and 03/05/2004 has been considered.

#### *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 12-15, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,473,794 to Guheen et al.

Per claim 1:

-receiving, by a service provider, at least one software component from a customer, wherein the at least one software component includes software instructions; (Guheen: Col. 175, lines 56-59, "Data relating to needs of a user may also be received for the purpose of outputting a recommendation of the products and services based on the inputted needs.")

-providing, by said service provider, test code for testing said at least one software component; (Guheen: Col. 271, lines 5-27, "Automatically compiles finished code (software component includes software instructions) to test technical correctness...")

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-testing with said test code said at lest one software component; (Guheen: Fig. 97, #3606 and col. 270, lines 54-55, "...in operation 3606, the operability of the system applications are tested.")

-monitoring, by said service provider, results of said testing; (Guheen: Col. 268, lines 65-67, "Monitors production web site performance and traffic...")

-providing, by said service provider, the results of said testing to said customer. (Guheen: Col. 269, lines 1-3, "The management and operations component of the present invention may monitor production web site performance and traffic.")

Per claims 2 - 4: (Guheen: Col. 193, line 62 – col. 194, line 10, and col. 178, line 35, "...pay for services...", and col. 268, lines 54-60, "...bill for that usage...a user would be billed for belonging to a site requiring a monthly fee for viewing.")

Per claim 5: (Guheen: Col. 185, lines 10-12, "The present invention provides a system and method for conducting commerce via an electronic means, such as a computer network."(sending and receiving data related to commerce, i.e. a component for testing / test results / fee payment, over a network.) )

Per claims 6 & 7: (Guheen: Col. 190, lines 14-18, "...contact millions of potential customers is to use the global Internet...using the well defined TCP/IP protocol.")

Per claim 12: (Guheen: Col. 2, lines 9-15 and col. 7, lines 65-67, "...pictorial representation of an existing network framework is displayed...")

Per claim 13:

-said at least one software component comprises a software component which can be interpreted by a web browser.

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(Guheen: Col. 15, lines 14-15 and col. 19, bottom of page, "JavaBeans Development Kit")

Per claim 14:

-said at least one software component comprises an application.

(Guheen, Col. 27, lines 35-36, "Provides ability to preview, test and change applications before production stage.")

Per claim 15: (Guheen: Co. 271, lines 61-62, "WEB SITE TESTING TOOLS...")

Per claim 19: (Guheen: Col. 161, lines 14-15, "Archiving can be used to move information to or from distributed and centralized sites.")

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-10, 11, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,473,794 to Guheen et al., in view of U.S. Patent 5,371,883 to Gross et al.

Guheen disclosed a system for testing components of web based frameworks. Guheen col. 272, lines 1-11, "Enables programmatic control of load generation. Allows tests to be scheduled and load to be varied over time (type of testing to be done) ...Error messages are logged and performance statistics are recorded (process results from said testing). Programmatic control of load generation may be enabled. Tests can be scheduled and loaded to be varied over time."

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Guheen failed to disclose details on receiving directions regarding the type of testing to be done, how to process results from testing, the test format, and determining the input / output parameters. However, Gross provided more details regarding testing in a networked environment in his invention.

Per claim 8:

-said step of receiving the at least one software component further comprises the step of receiving directions regarding the type of testing to be done on said at least one software component.

(Gross: Col. 4, lines 47-52, "...user specifies...values...applicable...(directions regarding the type of testing to be done)" )

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen's invention to test components of a web based framework by including Gross' invention of testing in a distributed environment, because although Guheen showed a linked host and target, he failed to show the step of receiving directions regarding the type of testing to be done. Gross provided more details on test plans. Furthermore, (col. 2, lines 5-7) the "centralized database of test case information...used in planning, tracking, and as input to the control process" provides an improved method of testing in a distributed environment. Various software tests are well known in the art.

Per claim 9: (Guheen: Col. 131, line 18, "...prepare for regression testing...", and col. 256, lines 28-31, "Load Balancing Spreads tasks among application servers using an intelligent load

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balance scheme” and col. 271, lines 1-2, “local and remote hyperlinks may be automatically tested” and line 10, “test technical correctness” and lines 61-63, “Simulates multiple users on web site” Also, col. 272, lines 2-4, Enables programmatic control of load generation. Allows tests to be scheduled and load to be varied over time.” Also, See col. 185, lines 10-42, “method for conducting commerce via an electronic means, such as a computer network...the Internet as a transport mechanism to transmit data representing purchase requests (server receives software component to be tested)...Some of these servers are connected to external, third-party services (a testing service)...The actual applications...are represented as extensions of the application servers...”

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen’s invention to test components of a web based framework by including Gross’ invention of testing in a distributed environment, because although Guheen showed a linked host and target, he failed to specify test types such as functional , regression load and compliance. These tests are commonly used to confirm software correctness and are well known in the art.

Per claims 10 and 11: Gross disclosed “receiving directions regarding how to process results from said testing” / “results...provided in a pass/fail format.” (Gross: Col. 6, lines 34-38, “...user can produce many reports...” Gross: Col. 3, lines 23-26, “...the results are correct...”)

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen’s invention to test components of a web based

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framework by including Gross' invention of testing in a distributed environment, that included more information on results, a necessary element of test plans. Furthermore, (col. 2, lines 5-7) the "centralized database of test case information...used in planning, tracking, and as input to the control process" (the use of results from testing) provides an improved method of testing in a distributed environment.

Per claim 16:

-said step of providing further comprises the step of providing access to multiple containers for testing the performance of said software component in different ones of said multiple containers, wherein each of the multiple containers comprises one or more portions of software code associated with one or more respective application servers.

(Gross: Fig. 1 and col. 7, lines 31-38, "Clearly the number of Test Cases and Test Programs engaged in any test is limited only by the number of machines attached (containers) to the Control Machine by some network connection...track the status of each Test Program (portions of software code) as they execute the successive steps of their associated Test Cases..." )

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen's invention to test component of a web based framework by including Gross' invention of testing in a distributed environment, because although Guheen showed a linked host and target, he failed to give details on a variety of test techniques for (col. 1, lines 26-30) adequately testing...each of the modules, integrating the modules...testing the subsystem and...the entire system. Furthermore, (col. 2, lines 5-7) the "centralized database of test case information...used in planning, tracking, and as input to the control process" provides



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an improved method of testing in a distributed environment. The use of multiple test containers provides a more detailed test.

Per claim 17: (Gross: Col. 3, lines 7-17, "...creation and storage of Test Case...Control Machine...contains...test cases and their expected results..." Also, Gross, col. 3, lines 50-66, "Test Case is comprised of specified inputs...and expected outputs...generate functional variations. This involves expanding on those functions to include variations of the input values..and even output values. The last step is to select combinations of these variations to form test cases. (determining what inputs and outputs must be specified for that software component)" Also, col. 4, lines 3-26, "...define ...programming interface calls...The definitions include all fields or parameters that are used...all values (specified inputs / outputs) that must be used in any test case must be defined...definitions are stored as a unique entry..." )

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen's invention to test a component of a web based framework by including Gross' invention of testing in a distributed environment, because although Guheen showed a linked host and target, he failed to show details of testing including determining what inputs and outputs must be specified. By using proper inputs and outputs the test can be made more useful.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,473,794 to Guheen et al., in view of U.S. Patent 5841670 to Swoboda.

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-wherein said step of testing further comprises the step of testing selected ones of the at least one software component typically used through a graphical user interface by building test drivers for the selected ones of the at least one software component and testing without the graphical user interface.

Guheen disclosed a system for testing components of web based frameworks. Guheen failed to disclose using a graphical user interface to test the components. However Swoboda disclosed (Fig. 45, and col. 8, lines 20-26) software emulation using the user interface to test components.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Guheen's invention to test component of a web based framework by including emulation using a graphical user interface because (col. 1, lines 64-67) "designed-in testability is needed, so that the finished product is still both controllable and observable during test and debug.

### ***Response to Arguments***

8. Applicant's arguments filed 11/12//2003 and 01/26/2004 have been fully considered but they are not persuasive.

9. Applicant has argued, in substance, the following:

(A) Guheen neither describes nor suggests "...receiving by a service provider, at least one software component from a customer, wherein the at least one software component includes

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software instructions”, as set forth in Claim 1. Applicants submit that the web architecture framework (WAF) described by Guheen does not provide software instruction uploaded to a testing service as in the present invention.

**Examiner’s Response:**

See response to claim 1 above. Guheen disclosed at col. 175, line 56-59, “data relating to needs of a user” which could include software components, including instructions, for which testing services need to be purchased.

**(B)** Guheen does not describe “a method of providing a software testing service...”

**Examiner’s Response:**

In response to applicant's arguments, the recitation “a method of providing a software testing service” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Indeed, Guheen does provide services. Note the title “System for establishing plan to test components of web based framework...” The Abstract further reveals “A system, method, and article of manufacture are provided for testing of components...”

Additionally, as previously provided in Examiner’s Response to Arguments: Examiner responds: Col. 2, lines 6-8, Guheen disclosed, “A system, method and article of manufacture are

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provided for planning the testing of components of an existing network framework.” Guheen provides services available for sale (col. 11, line 48). Guheen disclosed (col. 13, lines 45-47), “...one embodiment of the present invention may be used in test planning or the like.” At col. 175, Guheen disclosed commerce related web application services, “allowing purchase of products and services...(lines 50-51)” “Data relating to the needs of a user may also be received (components for testing and test parameters supplied by customer)”. Column 176 continues to disclose pricing and payments for the services. See figures 19 and 20 that suggest components are tested in a networked commerce environment. Guheen's invention is related to a client purchasing services (in this case, test services) for a fee from an application service provider. The service may include receiving data (components and parameters) from a client to process for a fee.

(C) Regarding claims 5-7 and 9, Guheen neither describes nor suggests “...said step of receiving the at least one software component...”

**Examiner's Response:**

See col. 185, lines 10-42, “method for conducting commerce via an electronic means, such as a computer network...the Internet as a transport mechanism to transmit data representing purchase requests (server receives software component to be tested)...Some of these servers are connected to external, third-party services (a testing service)...The actual applications...are represented as extensions of the application servers...”

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(D) Regarding claims 8, 10, 11, 16, and 17, the recited art Guheen and Gross, neither describe nor suggest "...receiving, by a service provider, at least one software component from a customer, wherein the at least one software component includes software instructions."

**Examiner's Response:**

Any software is composed of a series of computer instructions. See col. 185, lines 10-42, "method for conducting commerce via an electronic means, such as a computer network...the Internet as a transport mechanism to transmit data representing purchase requests (server receives software component to be tested)

(E) The combination of the Guheen reference and the Gross reference does not result in the claimed invention, but rather a web application framework in which a user can specify values used in a test case, not testing of software components, i.e., software instructions, provided by a testing service.

**Examiner's Response:**

Guheen's reference provides for an e-commerce ability, the purchasing of a service. Guheen further discloses developer services at col. 270, lines 45-col. 272, line 18, "one embodiment of the present invention is provided for affording a combination of web development-related services. Various features may be included...testing tools..." At col. 270, line 65, "The web development component of the present invention may provide application languages, tools, and utilities" At col. 271, line 10, "Automatically compiles finished code to test technical correctness (test software components)" In addition to Guheen's "service for a fee" (software

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testing service), Gross provided more details on testing programs (software instructions) in a distributed environment.

(F) Regarding claims 8 and 10, neither Guheen nor Gross disclose...said step of receiving the at least one software component further comprises the step of receiving directions regarding the type of testing to be done on said at least one software component / how to process results from said testing.

**Examiner's Response:**

(Gross: Col. 4, lines 47-52, "...user specifies...values...applicable...(directions regarding the type of testing to be done)" Gross provided more details on results, a necessary element of test plans. Furthermore, (col. 2, lines 5-7) the "centralized database of test case information...used in planning (receiving directions regarding the type of testing to be done), tracking, and as input to the control process" provides an improved method of testing in a distributed environment.

(G) Regarding claim 16, neither Guheen nor Gross disclose a "...step of providing access to multiple containers for testing the performance of said software component in different ones of said multiple containers, wherein each of the multiple containers comprises one or more portions of software code associated with one or more respective application servers."

**Examiner's Response:**

See response to (F) above regarding variations of testing. See Gross, col. 7, lines 31-38, "Clearly the number of Test Cases and Test Programs engaged in any test is limited only by the number of machines attached (containers) to the Control Machine by some network connection...track the

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status of each Test Program (portions of software code) as they execute the successive steps of their associated Test Cases...”

**(H)** Regarding claim 17, neither Guheen nor Gross disclose “...said step of providing further comprises the step of determining the parameters of the data component and determining what inputs and outputs must be specified for that software component.”

**Examiner’s Response:**

See Gross, col. 3, lines 50-66, “Test Case is comprised of specified inputs...and expected outputs...generate functional variations. This involves expanding on those functions to include variations of the input values..and even output values. The last step is to select combinations of these variations to form test cases. (determining what inputs and outputs must be specified for that software component)” Also, col. 4, lines 3-26, “...define ...programming interface calls...The definitions include all fields or parameters that are used...all values (specified inputs / outputs) that must be used in any test case must be defined...definitions are stored as a unique entry...”

**(I)** Regarding claim 18, neither Guheen nor Swoboda disclose software instruction received and tested by a service provider.

**Examiner’s Response:**

See Guheen’s title, “System for establishing plan to test components of web based framework...” Guheen discloses testing of software (software instructions) for a fee, which of course requires “receiving” the software to be tested.

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In conclusion, Guheen disclosed a method for testing services, using a network, including a fee arrangement. Gross provided additional details regarding the testing of software. These are well known in the art. Examiner maintains the rejection of claims 1-19.

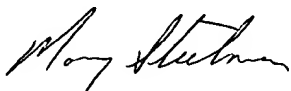
***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552.

The fax phone number is (703) 872-9306 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mary Steelman



03/10/2004



**TUAN DAM  
SUPERVISORY PATENT EXAMINER**